UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Bey 1459.

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

113 7590 07/06/2009

GRIFFIN BUTLER WHISENHUNT & SZIPL LLP SUITE PH-I

2300 NINTH STREET SOUTH ARLINGTON, VA 222042396 EXAMINER
JANAKIRAMAN, NITHYA

ART UNIT PAPER NUMBER

2123 DATE MAILED: 07/06/2009

 APPELICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONTERMATION NO.

 10/553,602
 10/18/2005
 Masaya Kato
 ASAIN0169
 6018

TITLE OF INVENTION: METHOD AND PROGRAM FOR LABELING MULTI MATERIAL DATA

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

indicated unless correct maintenance fee notifica	ed belôw or directed oth	nerwise in Block 1, by (a	a) specifying a new co	orrespond	ence address; a	nd/or (b) indicating a ser	arate "FEE ADDRESS" for
				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
113 7590 (7066/2009) GRIFFIN BUTLER WHISENHUNT & SZIPL LLP SUITE PH-1 2300 NINTH STREET SOUTH			P	Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmital is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 272-2885, on the date indicated below the Computer of the Comp			
ARLINGTON,	VA 222042396						(Depositor's name)
							(Signature)
			l				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	FOR	/	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,602	10/18/2005	•	Masaya Kato		ASAIN0169		6018
		GRAM FOR LABELING					
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE PRE	V. PAID ISSUE	FEE TOTAL FEE(S) DUI	DATE DUE
nonprovisional	NO	\$1510	\$300		\$0	\$1810	10/06/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
JANAKIRAM	IAN, NITHYA	2123	703-006000				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.5d3).  Change of correspondence address for Change of Correspondence Address from PTOSB/122) authented.  The Address' indication (or "Fee Address" Indication for See Address' Indication for Tee Address' Indication for Tee Address' Indication for Tee Address' Indication for Tee Address' Indication for Constitution of Constitution (or Tee Address' Indication for Constitution of Constitution (or Tee Address' Indication for Constitution (or Tee Address' Indication for Constitution for Con			(I) the names of u or agents OR, alteri (2) the name of a segistered attorney 2 registered patent listed, no name will THE PATENT (print or	ames of up to a registered patent attorneys  1			
(A) NAME OF ASSI	GNEE	oletion of this form is NO	(B) RESIDENCE: (C	ITY and	STATE OR CO	UNTRY)	oup entity 🚨 Government
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies			b. Psyment of Fee(s): (Please first reapply any previously paid issue fee shown above)  \[ \] \				
a. Applicant claim	itus (from status indicate ns SMALL ENTITY statu nd Publication Fee (if req	us. See 37 CFR 1.27.	d from anyone other th			ENTITY status. See 37 Cered attorney or agent; or t	FR 1.27(g)(2). he assignee or other party in
interest as shown by the	records of the United Sta	tes Patent and Trademark	Omce.				
Authorized Signature				I	Date		
Typed or printed name				Registration No.			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V	nation is required by 37 C stiality is governed by 35 d application form to the ions for reducing this but /irginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the in e Chief Information Of COMPLETED FORMS	or retain s estimate ndividual fficer, U.S S TO THI	a benefit by the d to take 12 mi case. Any com S. Patent and Ti IS ADDRESS.	public which is to file (ar nutes to complete, includi ments on the amount of t rademark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Alexandria, Virginia 22313-1450.



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/553,602	10/18/2005	Masaya Kato	ASAIN0169	6018	
113 75	90 07/06/2009		EXAM	UNER	
GRIFFIN BUTLER WHISENHUNT & SZIPL LLP			JANAKIRAMAN, NITHYA		
SUITE PH-1			ART UNIT	PAPER NUMBER	
2300 NINTH STREET SOUTH ARLINGTON, VA 222042396			2123		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 616 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 616 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)	Applicant(s)				
10/553,602	KATO ET AL.					
Examiner	Art Unit					
NITHYA JANAKIRAMAN	2123					

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 5/22/09.
- The allowed claim(s) is/are 1 and 3-6.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) 

    All b) 

    Some\* c) 

    None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) I hereto or 2) to Paper No./Mail Date \_\_\_\_\_
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 5/22/09
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other \_\_\_

Application/Control Number: 10/553,602 Page 2

Art Unit: 2123

#### DETAILED ACTION

This action is in response to the submission filed on 5/22/09. Claims 1 and 3-6 are presented for examination.

### REASONS FOR ALLOWANCE

- Claims 1 and 3-6 are allowed.
- 2. Gürsoy and Ju teach a method for labeling multi material data, the steps including acquisition of external data, storage of cell data through octree division of the external data, and simulation using the cell data. However, these references and the remaining prior art of record fails to disclose or suggest
- "(D1) assigning all the non-boundary cells space numbers different for respective spaces partitioned by boundary data; and
- (D2) assigning each vertex of the boundary cell the space number of the neighboring non-boundary cell that is not partitioned by the boundary data",

in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicant's invention defines over the prior art of record

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2123

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to NITHYA JANAKIRAMAN whose telephone number is

(571)270-1003. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm.

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Paul Rodriguez can be reached on (571)272-3753. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nithya Janakiraman/ Examiner, Art Unit 2123

/Kidest Bahta/

Primary Examiner, Art Unit 2123